



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor
Toni Hardesty, Director

March 10, 2005

Certified Mail No. 7099 3220 0009 1975 0405

Ross Parker
Regional Director, Pipeline Operations and Maintenance
Gas Transmission Northwest Corporation
534 E. Trent Ave., Suite 100
Spokane, WA 99202

RE: Facility ID No. 017-00037, Gas Transmission Northwest Corporation, Samuels
Final Permit Letter

Dear Mr. Parker:

The Idaho Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) Number P-040117 for Gas Transmission Northwest Corporation in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho). This permit is effective immediately and is based on your permit application received on August 13, 2004.

This permit does not release Gas Transmission Northwest Corporation from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

A representative of the Coeur d'Alene Regional Office will contact you regarding a meeting with DEQ to discuss the permit terms and requirements. DEQ recommends the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to call Bill Rogers at (208) 373-0502 to address any questions or concerns you may have with the enclosed permit.

Sincerely,

Martin Bauer, Administrator
Air Quality Division

MB/ ABC/sd

Permit No. P-040117

Enclosures



**Air Quality
PERMIT TO CONSTRUCT**
**State of Idaho
Department of Environmental Quality**

PERMIT No.: P-040117
FACILITY ID No.: 017-00037
AQCR: 063 **CLASS:** A
SIC: 4922 **ZONE:** 11
UTM COORDINATE (km): 538.1, 5364.6

1. PERMITTEE

Gas Transmission Northwest Corporation

2. PROJECT

PTC Revision - Unit 4A natural gas-fired turbine - Compressor Station No. 4

3. MAILING ADDRESS

534 E. Trent Ave., Suite 100

CITY

Spokane

STATE

WA

ZIP

99202

4. FACILITY CONTACT

Jeffrey S. Pollock

TITLE

Environmental Engineering Supervisor

TELEPHONE

(509) 533-2834

5. RESPONSIBLE OFFICIAL

Ross Parker

TITLE

Regional Director, Pipeline Operations and Maintenance

TELEPHONE

(503) 833-4210

6. EXACT PLANT LOCATION

237 Samuels Road, Samuels, Idaho 83864

COUNTY

Bonner

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Natural gas pipeline compressor station

8. GENERAL CONDITIONS

This permit is issued in accordance with IDAPA 58.01.01.200 (Rules for the Control of Air Pollution in Idaho), and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit is not transferable to another person, place, or piece or set of equipment. This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes of design or equipment may require DEQ approval pursuant to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.200, et seq.


TONI HARDESTY, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED: March 10, 2005

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AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040117

Permittee:	Gas Transmission Northwest Corp. Compressor Station No. 4	Facility ID No. 017-00037	Date Issued:	March 10, 2005
Location:	Samuels, Idaho			

1. PERMIT TO CONSTRUCT SCOPE***Purpose***

This PTC is a revision to the facility's existing permit. This permit revision is a change in the facility's name and a change in the responsible official. This permit revision also incorporates the newly promulgated performance testing requirements of 40 CFR 60, Subpart GG.

This PTC replaces PTC No. P-030100, issued March 24, 2003, the terms and conditions of which shall no longer apply.

Regulated Sources

Table 1.1 below lists all sources of emissions that are regulated in this PTC:

Table 1.1 REGULATED EMISSION SOURCES

Permit Condition	Source Description	Emissions Control(s)
2	SoLoNO _x TM gas turbine Unit 4A	Dry low-NO _x [*] combustors

^{*} nitrogen oxides

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2. SOLONO_xTM GAS TURBINE UNIT 4A

2.1 Process Description

The Unit 4A gas turbine will power a new natural gas pipeline compressor at the Samuels station. The station is one of 12 compressor stations along GTN's dual mainline system running from Canada through Idaho, Washington, and Oregon to California.

2.2 Control Description

Emissions from Unit 4A are controlled by dry low-NO_x combustion. Dry low-NO_x combustion control is achieved by reducing peak flame temperature and employing lean pre-mixed combustion.

Emissions Limits

2.3 Emissions Limits

Particulate matter (PM), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM₁₀), sulfur dioxide (SO₂), NO_x, carbon monoxide (CO), and volatile organic compound (VOC) emissions from the Unit 4A stack shall not exceed any corresponding emissions rate limits listed in the following Table:

Table 2.1 UNIT 4A STACK EMISSIONS LIMITS

Gas Transmission Northwest, Samuels, Idaho										
Emissions Limits ^a										
Source	PM/ PM ₁₀		SO ₂		NO _x		VOC		CO	
	lb per MMscf ^b	T/yr ^c	lb per MMscf	T/yr	lb per MMscf	T/yr	lb per MMscf	T/yr	lb per MMscf	T/yr
SoLoNO _x TM gas turbine Unit 4A	6.73	4.21	2.86	1.79	164.4	85.4	2.14	1.34	119.6	74.8
Non-SoLoNO _x mode	-	-	-	-	NA ^e		-	-	-	-
In SoLoNO _x mode with ambient temperatures ^f less than 0°F	-	-	-	-	42.0 ppm ^g		-	-	-	-
In SoLoNO _x mode with ambient temperatures ^f greater than or equal to 0°F	-	-	-	-	25.0 ppm ^g		-	-	-	-

^a As determined by a pollutant-specific EPA reference method, DEQ-approved alternative, or as determined by DEQ's emissions estimation methods used in this permit analysis.

^b Pounds per million standard cubic feet

^c Tons per year as determined by multiplying the actual or allowable (if actual is not available) lb/hr emissions rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.

^d NGG-Gas Generator Speed

^e Unit 4A can only be operated in non-SoLoNO_x mode during startup, shutdown, and load change.

^f Ambient temperature is measured by a temperature probe at the air inlet for the gas turbine.

^g Parts per million

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2.4 Opacity Limit

Emissions from the Unit 4A gas turbine stack, any other stack, vent, or functionally equivalent opening associated with Unit 4A, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625, Rules for the Control of Air Pollution in Idaho. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

2.5 Grain-loading Requirement for Fuel-burning Equipment

Particulate emissions from the Unit 4A gas turbine stack shall not exceed a concentration of 0.015 grains per dry standard cubic feet (gr/dscf) corrected to 3% oxygen.

Operating Requirements**2.6 Normal Operating Range**

The Unit 4A gas turbine shall only operate in non-SoLoNO_x mode during periods of startup, shutdown, and load change.

2.7 Fuel Throughput Limit

The maximum annual fuel throughput of the Unit 4A gas turbine shall not exceed 1.251 billion standard cubic feet per any consecutive 12-month period (1,251,000,000 scf/yr).

2.8 Fuel Sulfur Content

No fuel containing sulfur in excess of 0.8% by weight shall be burned in the Unit 4A gas turbine.

2.9 Reasonable Control of Fugitive Emissions

All reasonable precautions shall be taken to prevent PM from becoming airborne as required in IDAPA 58.01.01.651. In determining what is reasonable, considerations will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of PM. Some of the reasonable precautions include, but are not limited to, the following:

- 2.9.1 Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
- 2.9.2 Application, where practical, of asphalt, oil, water or suitable chemicals to, or covering of dirt roads, material stockpiles, and other surfaces which can create dust.
- 2.9.3 Installation and use, where practical, of hoods, fans and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.

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2.9.4 Covering, where practical, of open-bodied trucks transporting materials likely to give rise to airborne dusts.

2.9.5 Where practical, paving of roadways and their maintenance in a clean condition.

2.9.6 Prompt removal, where practical, of earth or other stored material from streets.

2.10 Air Pollution Emergency Rules

The permittee shall comply with the Air Pollution Emergency Rules in IDAPA 58.01.01.550-562.

Monitoring and Recordkeeping Requirements

2.11 Performance Testing

The permittee may satisfy the requirements of Permit Conditions 2.11.1 and 2.11.2 concurrently. The initial performance test, and any subsequent performance tests conducted to demonstrate compliance, shall be performed in accordance with IDAPA 58.01.01.157, General Provision 6 of this permit and the following conditions:

2.11.1 NSPS Subpart GG Requirements

Within 60 days after achieving the maximum production rate at which the source will operate, but not later than 180 days after initial startup, the permittee shall conduct performance tests to satisfy the requirements listed in 40 CFR 60.8 and 40 CFR 60.335.

2.11.2 BACT Demonstration

Within 60 days after achieving the maximum production rate at which the source will operate, but not later than 180 days after initial startup, the permittee shall conduct performance tests to verify the emission factors for NO_x and CO. Emission factor testing shall be performed at four load points in the normal operating range of the gas turbine including the minimum load in the operating range and the maximum achievable load.

2.11.3 Visible Emissions

Visible emissions shall be observed during each performance test run using the methods specified in IDAPA 58.01.01.625.

2.11.4 Fuel Throughput

The throughput of natural gas in standard cubic feet per hour (scf/hr) to Unit 4A shall be recorded during each performance test.

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2.11.5 Performance Testing Frequency

A second emissions test shall be conducted within 24 months of the initial performance test to demonstrate continued compliance with the emission limits for NO_x and CO listed in the appendix. Emissions testing to demonstrate compliance shall be conducted at least once every 60 months thereafter.

2.12 Monitor Operating Parameters

A compilation of the most recent two years of records shall be kept onsite, and shall be made available to DEQ representatives upon request. The permittee shall monitor and record the following information:

2.12.1 Fuel Throughput and Operating Range

The permittee shall monitor and record the throughput of natural gas combusted in Unit 4A and the range of gas generator speed (%NGG), including periods of startup, shutdown, and load change, on a consecutive 12-month period basis. A compilation of the most recent two years of data shall be kept onsite and shall be made available to DEQ representatives upon request.

2.12.2 Sulfur and Nitrogen Content Monitoring – New Source Performance Standard Requirements

The permittee shall demonstrate that the fuel combusted in the Unit 4a turbine engines meets the definition of natural gas in 40 CFR 60.331(u). The permittee shall use one of the following sources of information to make the required demonstration:

- The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
- Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.
- No monitoring of fuel nitrogen content is required so long as the permittee does not claim an allowance for fuel bound nitrogen as described in 40 CFR 60.332(a), and so long as natural gas is the fuel fired in the turbine engines.

2.13 Operations and Maintenance Manual Requirements

Within 60 days after startup, the permittee shall have developed an Operations and Maintenance (O&M) manual for Unit 4A which describes the procedures that will be followed to comply with General Provision 2 and the air pollution control device manufacturer specifications. This Manual shall remain onsite at all times and shall be made available to DEQ representatives upon request.

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2.14 Fugitive Dust Complaint Response

The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action within 24 hours after receipt of a valid complaint. The records shall, at a minimum, include the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

Reporting Requirements**2.15 Performance Test Protocol**

The permittee is encouraged to submit a test protocol for the performance test required in Permit Condition 2.11 to DEQ for approval at least 30 days prior to the test days.

2.16 Performance Test Report

The permittee shall submit a report of the results of the performance test required in Permit Condition 2.11, including all required process data, to DEQ within 30 days after the date on which the performance test is concluded.

2.17 Certification of Documents

All documents submitted to DEQ, including but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certifications, shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

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3. APPENDIX

Table 3.1 EMISSION LIMITS SUMMARY

Gas Transmission Northwest, Samuels, Idaho										
Emissions Limits ^a										
Source	PM/ PM ₁₀		SO ₂		NO _x		VOC		CO	
	lb per MMscf ^b	T/yr ^c	lb per MMscf	T/yr	lb per MMscf	T/yr	lb per MMscf	T/yr	lb per MMscf	T/yr
SoLoNO _x ™ gas turbine Unit 4A	6.73	4.21	2.86	1.79	164.4	85.4	2.14	1.34	119.6	74.8
Non-SoLoNO _x mode ^d	-	-	-	-	NA ^e		-	-	-	-
In SoLoNO _x mode with ambient temperatures ^f less than 0°F	-	-	-	-	42.0 ppm		-	-	-	-
In SoLoNO _x mode with ambient temperatures ^f greater than or equal to 0°F	-	-	-	-	25.0 ppm		-	-	-	-

^a As determined by a pollutant-specific U.S. EPA reference method, DEQ approved alternative, or as determined by DEQ's emissions estimation methods used in this permit analysis.

^b pounds per million standard cubic feet

^c Tons per year is determined by multiplying the actual or allowable (if actual is not available) lb/hr emissions rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.

^d NGG - Gas generator Speed

^e Unit 4A can only be operated in non-SoLoNO_x mode during startup, shutdown, and load change.

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^g Parts per million

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4. PERMIT TO CONSTRUCT GENERAL PROVISIONS

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.
2. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.
3. The permittee shall allow the Director, and/or the authorized representative(s), upon the presentation of credentials:
 - To enter, at reasonable times, upon the premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
 - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the Director.
4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
5. The permittee shall notify DEQ, in writing, of the required information for the following events within 5 working days after occurrence:
 - Initiation of Construction - Date
 - Completion/Cessation of Construction - Date
 - Actual Production Startup - Date
 - Initial Date of Achieving Maximum Production Rate - Production Rate and Date
6. The Director may require the permittee to develop a list of operation and maintenance procedures to be submitted to DEQ. Such list of procedures shall become a part of this permit by reference, and the permittee shall adhere to all of the operation and maintenance procedures contained therein.
7. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

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All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

8. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
9. In accordance with IDAPA 58.01.01.123, all documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.